

CLAIMS

1. Nozzle for a medium or high voltage gas switching device of the type having at least a couple of separable arc contacts (1, 2), comprising a hollow shaped body (100) suitable to be positioned inside the device around the zone (20) where electric arcs form between said arc contacts (1, 2) during switching operations, characterized in that said hollow shaped body (100) has a first portion (101) electrically conductive and a second portion (102) made of electrically insulating material which surrounds at least partially said first portion (101).
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2. Nozzle according to claim 1, characterized in that said hollow shaped body (100) is realized in a single body with said first portion (101) incorporated in said second portion (102).
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3. Nozzle according to claim 1, characterized in that said first portion (101) is shaped so as to act as an electric shield.
4. Nozzle according to one or more of the preceding claims, characterised in that said first portion (101) has a substantially annular shape and is positioned along an inner circumference path of the hollow shaped body (100).
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5. Nozzle according to one or more of the preceding claims, characterised in that said first portion (101) and /or said second portion (102) comprise moldable materials.
6. Nozzle according to claim 5, characterized in that said first portion (101) is made of a matrix of substantially moldable insulating material and a conductive filler.
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7. Nozzle according to claim 6, characterized in that the volume of said filler is in the range between 0,1% and 40%, preferably 0,5% and 35%, more preferably 1% and 30%, of the total volume of said first portion.
8. Nozzle according to one or more of the claims from 1 to 4, characterized in that the said first portion (101) is substantially made of a metallic piece.
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9. Nozzle according to one or more of the preceding claims characterized in that it is realized by means of co-injection molding.
10. Gas switching device for high and medium voltage applications comprising at least a mobile arc contact (2) and a fixed arc contact (1), characterized in that it comprises a nozzle according to one or more of the preceding claims.
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11. Gas switching device according to claim 10 characterized in that said nozzle is mechanically secured directly onto said mobile arc contact (2).
12. Gas switching device according to claim 11, characterized in that said nozzle is mechanically secured directly to the mobile arc contact (2) by means of conductive connecting means (110) which are configured so as to electrically connect said mobile arc contact (2) to said first portion (101).
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